

What is claimed:

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1. A pneumatic radial ply runflat tire (10) having a tread (12), a carcass (25) with two sidewalls (18,19) and two inextensible annular beads (26) and a radial ply structure (37) of one or more radial plies (30,40) and one or more inserts (46,48), and a belt structure (16) located between the tread and the radial ply structure, the runflat tire characterized by:
- 5      a fabric underlay (60) deployed between the belt structure (16) and the radial ply structure (37) for supporting tensile loads during both normal-inflated and runflat operating conditions, the fabric underlay containing high-modulus reinforcing cords (62) being aligned about 0 degrees to 20 degrees with respect to the equatorial plane
- 10      of the tire.
2. The tire (10) of claim 1 in which the fabric underlay (60) is disposed radially inward of the belt structure (16) and having opposing marginal edges (27,28) which extend laterally beyond lateral edges of the belt
- 15      structure.
3. The tire (10) of claim 1 in which the high-modulus reinforcing cords (62) of the fabric underlay (60) are made of high-modulus material selected from the group consisting essentially of polyester, nylon, rayon, aramid and glass.
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4. The tire (10) of claim 1 in which the fabric underlay (60) is located on the tensile side of the neutral bending axis of the combined belt structure (16), fabric underlay (60) and ply structure (37).

5 5. The tire (10) of claim 4 in which the circumferentially oriented cords (62) of the fabric underlay (60) are prestressed in tension during manufacturing of the tire.

10 6. The tire (10) of claim 1 in which the fabric underlay (60) separates the belt structure (16) from the ply structure (37).

15 7. The tire (10) of claim 1 in which the reinforcing cords (62) of the fabric underlay (60) are most preferably oriented at an angle of 0 degrees with respect to the equatorial plane of the tire.

8. The tire (10) of claim 1 in which a fabric overlay (540) is disposed between the belt structure (16) and the tread (12).

20 9. The tire (10) of claim 1 wherein at least one or more of radial plies (30,40) is reinforced by essentially inextensible cords.

10. A method of constructing a radial ply runflat tire (10) by the steps of:

a) forming a blown-up green tire carcass (25);

b) circumferentially wrapping a ribbon of cord-reinforced elastomeric material upon the blown-up green tire carcass to form the fabric underlay (60) so that the cords of the elastomeric material are oriented at an angle of about 0 degrees to about 5 degrees with respect to the equatorial plane of the blown-up green carcass;

c) blowing up the green tire carcass with the wrapped fabric overlay to engage a belt structure (16) and a tread (12) to form a completed green tire; and

10 d) blowing up the completed green tire in a curing mold to prestress the reinforcing cords (62) of the fabric underlay (60).

11. The method of claim 10 further including the step of circumferentially winding the ribbon of cord-reinforced elastomeric material about the blown-up green carcass such that the edges of the ribbon overlap.

12. The method of claim 10 further including the step of circumferentially winding the edges of the ribbon of cord-reinforced elastomeric material about the blown-up carcass such that the edges of the ribbon meet without overlapping.

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